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(71) Applicants (for all designated States except US):
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS) [FR/FR]; 3 Rue Michel-Ange, F-75794 PARIS CEDEX 16 (FR). **ECOLE POLYTECHNIQUE** [FR/FR]; Route de Saclay, F-91128 PALAISEAU CEDEX (FR). **JOBIN YVON S.A.S** [FR/FR]; 16-18 Rue du Canal, F-91160 LONGJUMEAU (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GARCIA-CAUREL, Enrique** [ES/FR]; Collège d'Espagne, Cité Universitaire, 7 Boulevard Jourdan, F-75014 PARIS (FR). **MONCEL, Jean-Luc** [FR/FR]; 10 Rue des Ardennes,

F-91220 BRETIGNY SUR ORGE (FR). **DREVILLON, Bernard** [FR/FR]; 15 Cité de la Pépinière, F-92140 CLAMART (FR). **BOS, Francis** [FR/FR]; 18 Rue des Coquelicots, F-91160 LONGJUMEAU (FR).

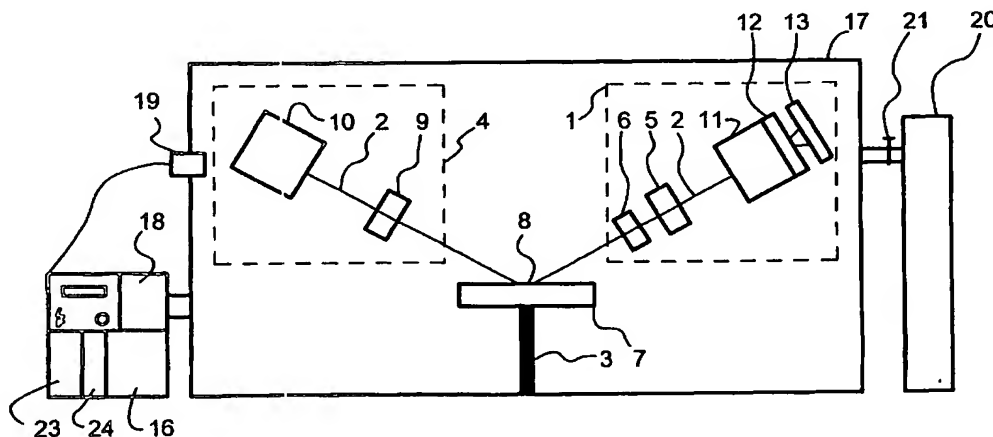
(74) Agents: **CATHERINE, Alain et al.**; Cabinet HARLE et PHELIP, 7 rue de Madrid, F-75008 PARIS (FR).

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(54) Title: METHOD AND DEVICE FOR POLARIMETRIC MEASUREMENT OF THE MUELLER MATRIX COEFFICIENTS OF A SAMPLE IN THE FAR ULTRAVIOLET TO VISIBLE SPECTRAL RANGE



(57) Abstract: The invention concerns a polarimetric system and a method of polarimetric measurement of the Mueller matrix coefficients of a sample (7). The polarimetric system contains an excitation section (1) emitting a light beam (2). Said light beam passes through a polarisation state generator (PSG) (5) and is focused on the sample (7) on a sample holder (3). After reflection on the sample surface (8), the beam goes through an analysis section (4) containing a polarisation state detector (PSD) or polarimeter (9) and detection means (10). According to the invention, the light beam (2) emitted by the excitation section (1) is in the spectral range from the far ultraviolet to the visible. The light beam propagates through the excitation section (1) up to through the analysis section (4) under a low partial pressure of far ultraviolet absorbing gases. The polarimetric system comprises one or more air tight chamber (17), said chambers containing said excitation section, said analysis section, and said sample holder.